

FIGURE 1

# RNAi in Drosophila

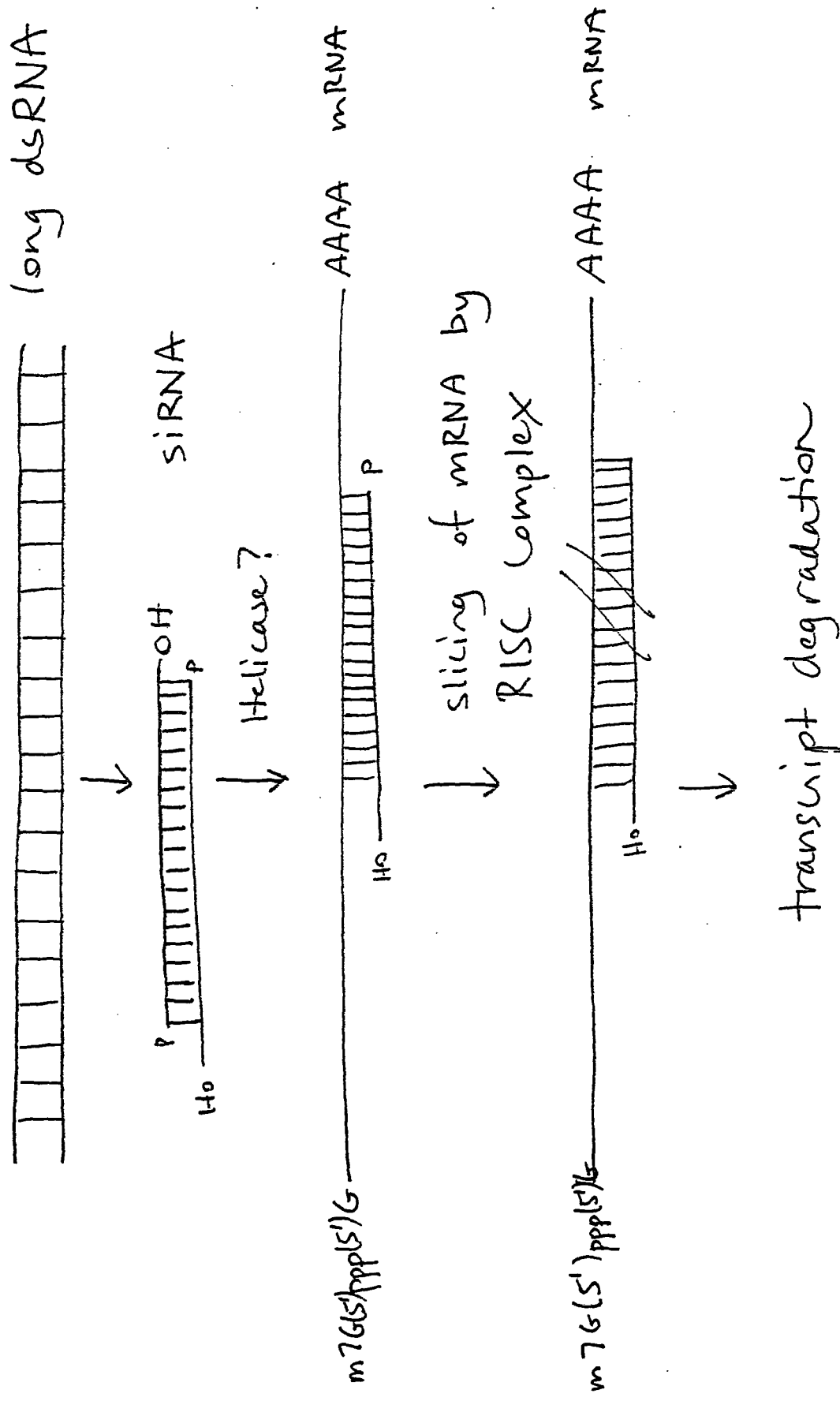


FIGURE 2

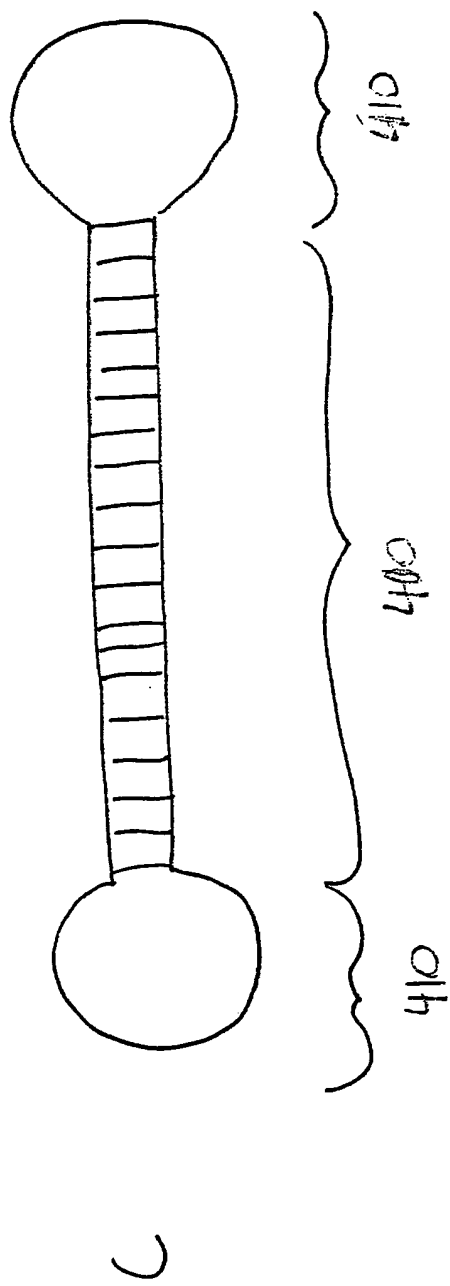
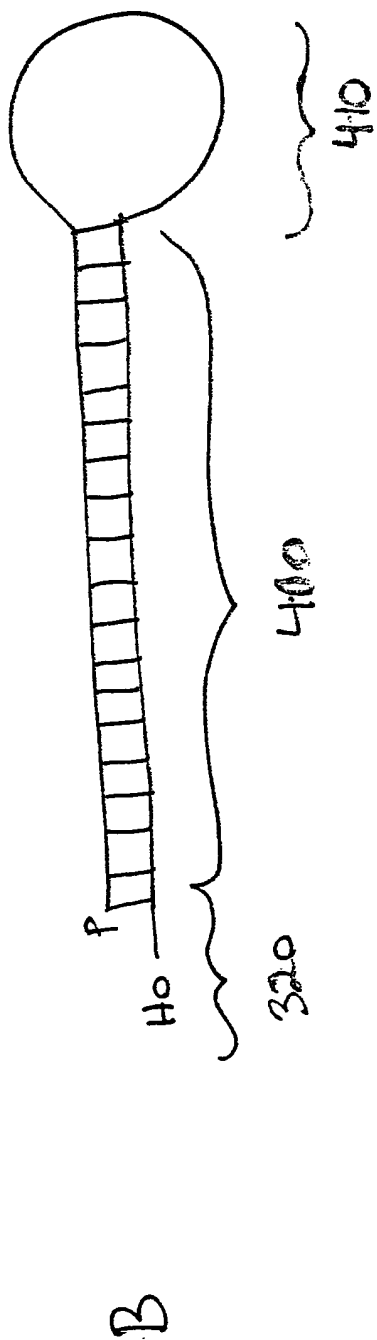
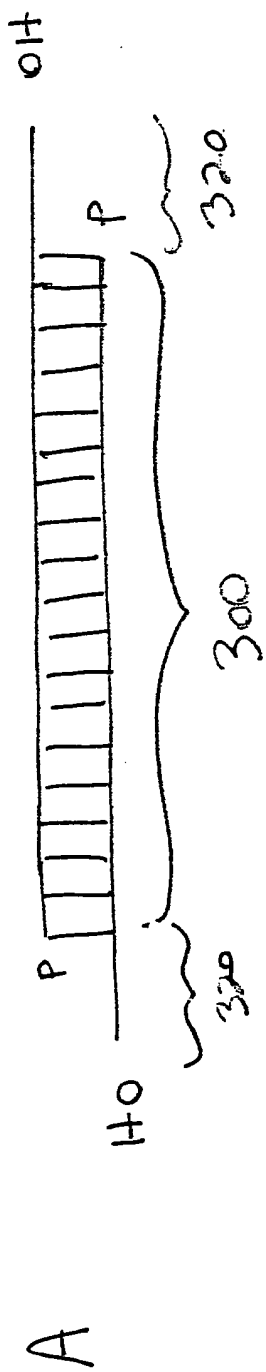


FIGURE 3

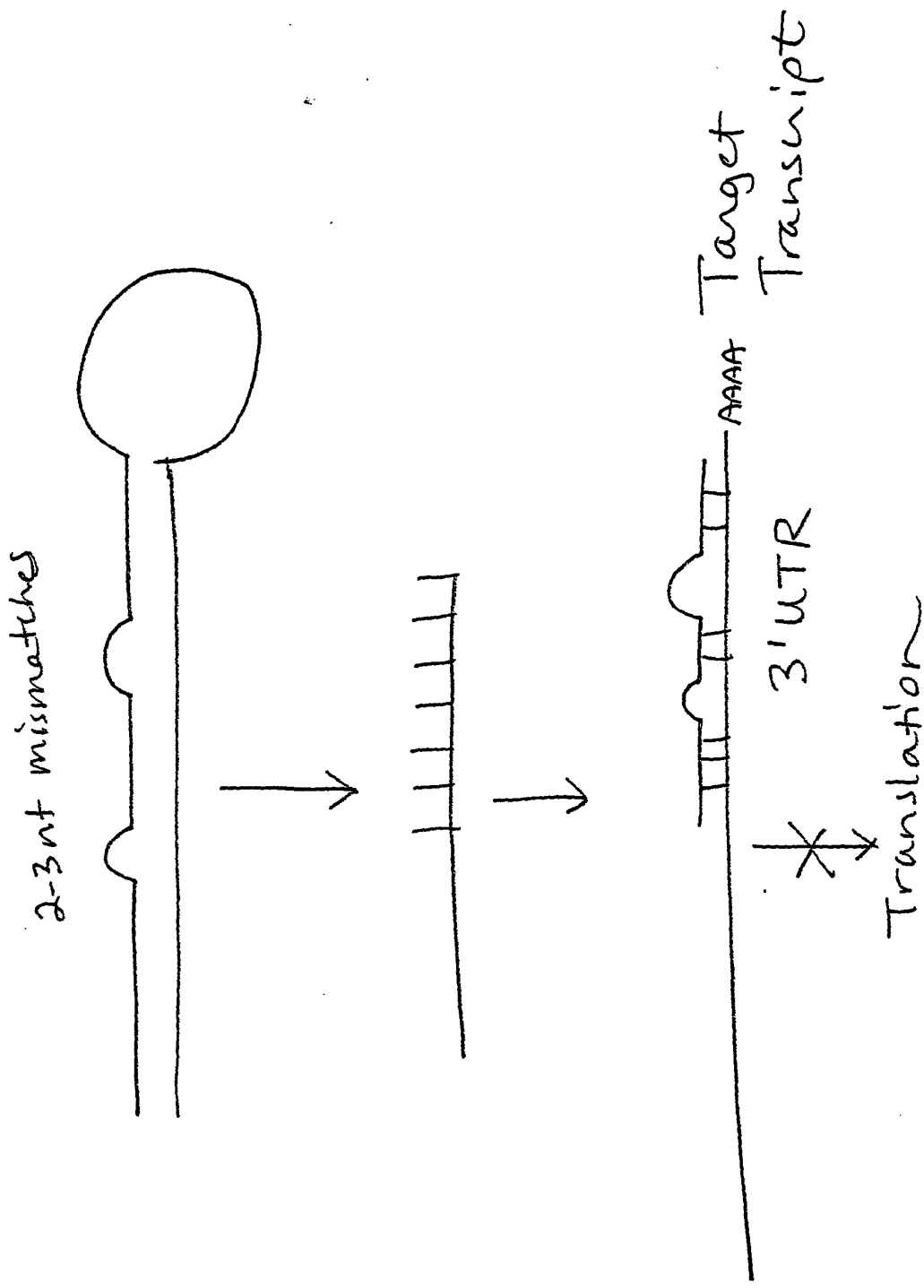


FIGURE 4

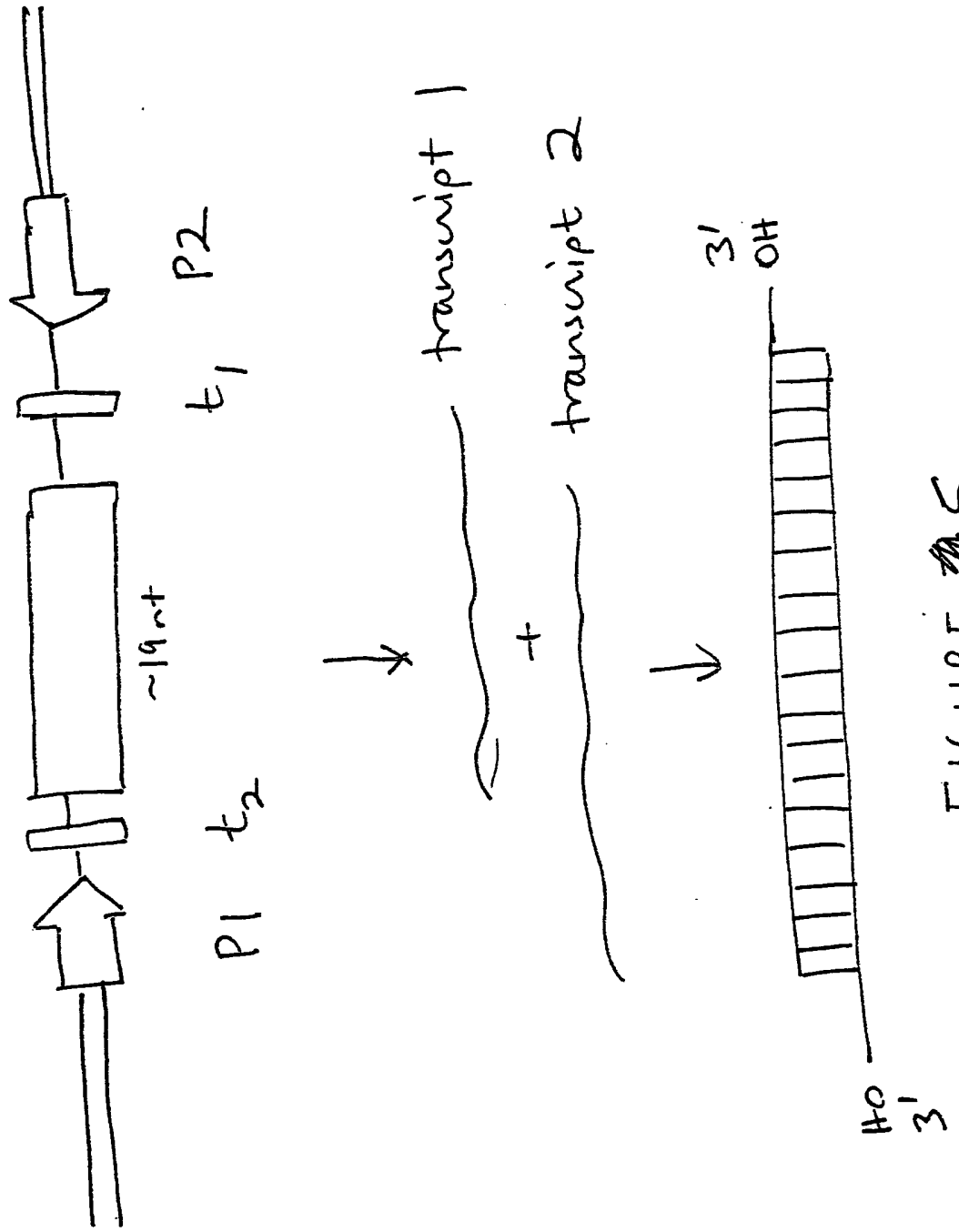


FIGURE 5

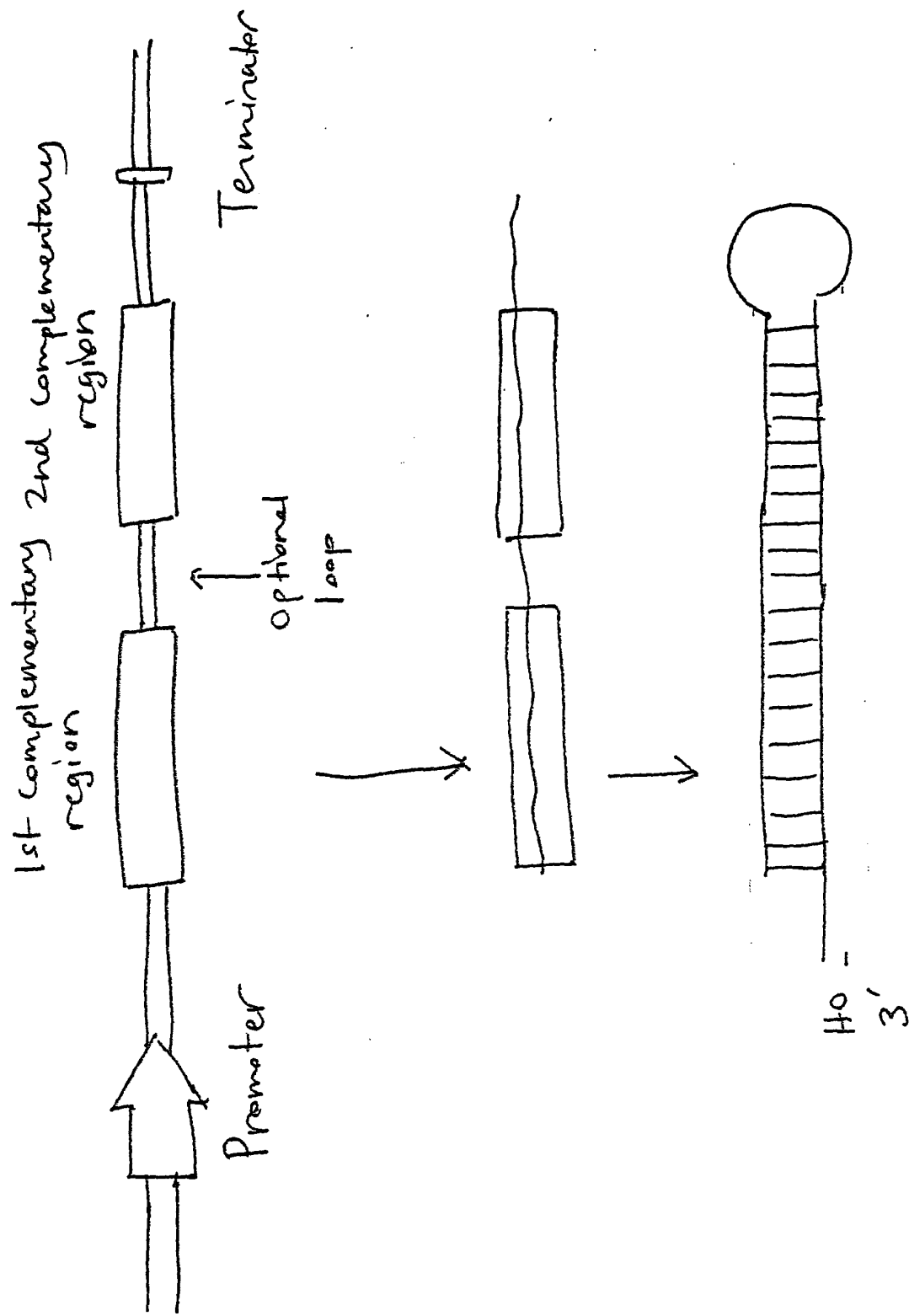


FIGURE #6



# siRNA prevent influenza virus production in mice

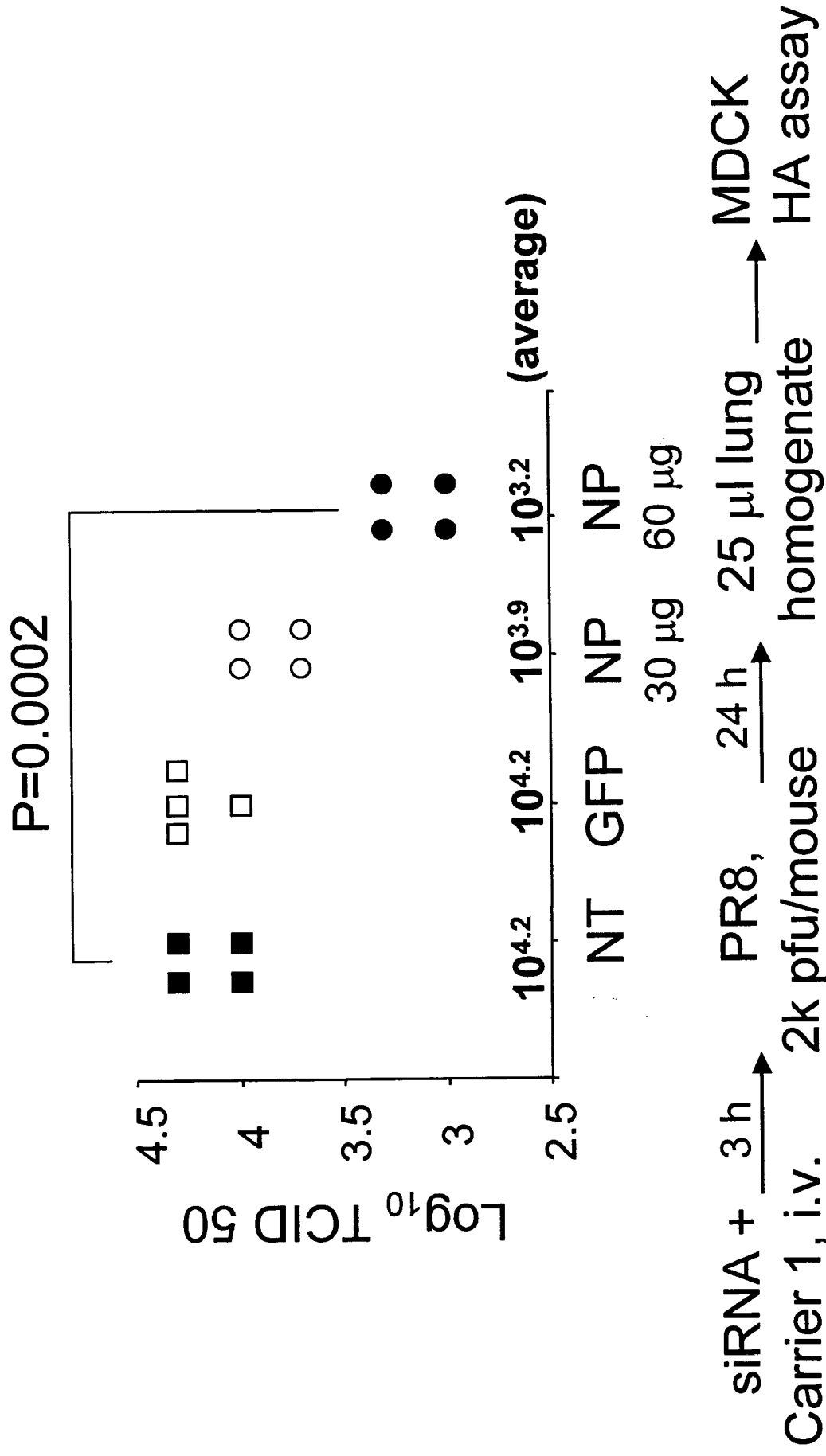
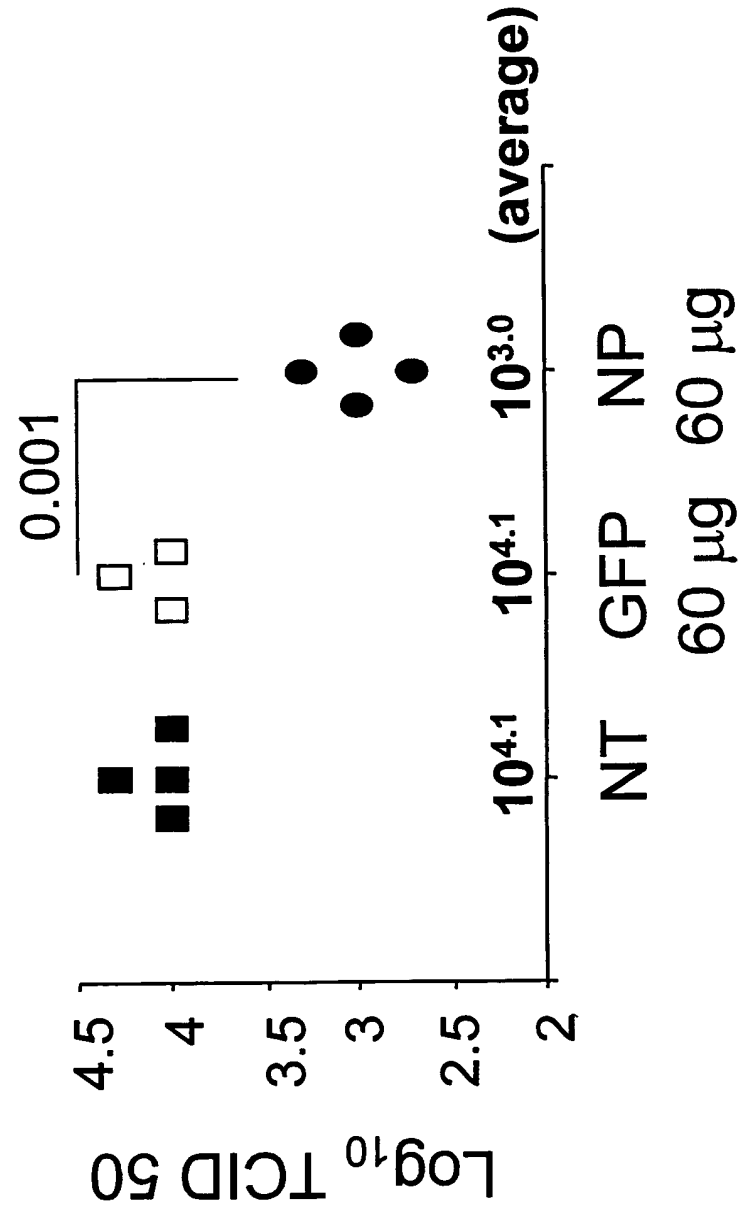


FIGURE 8A



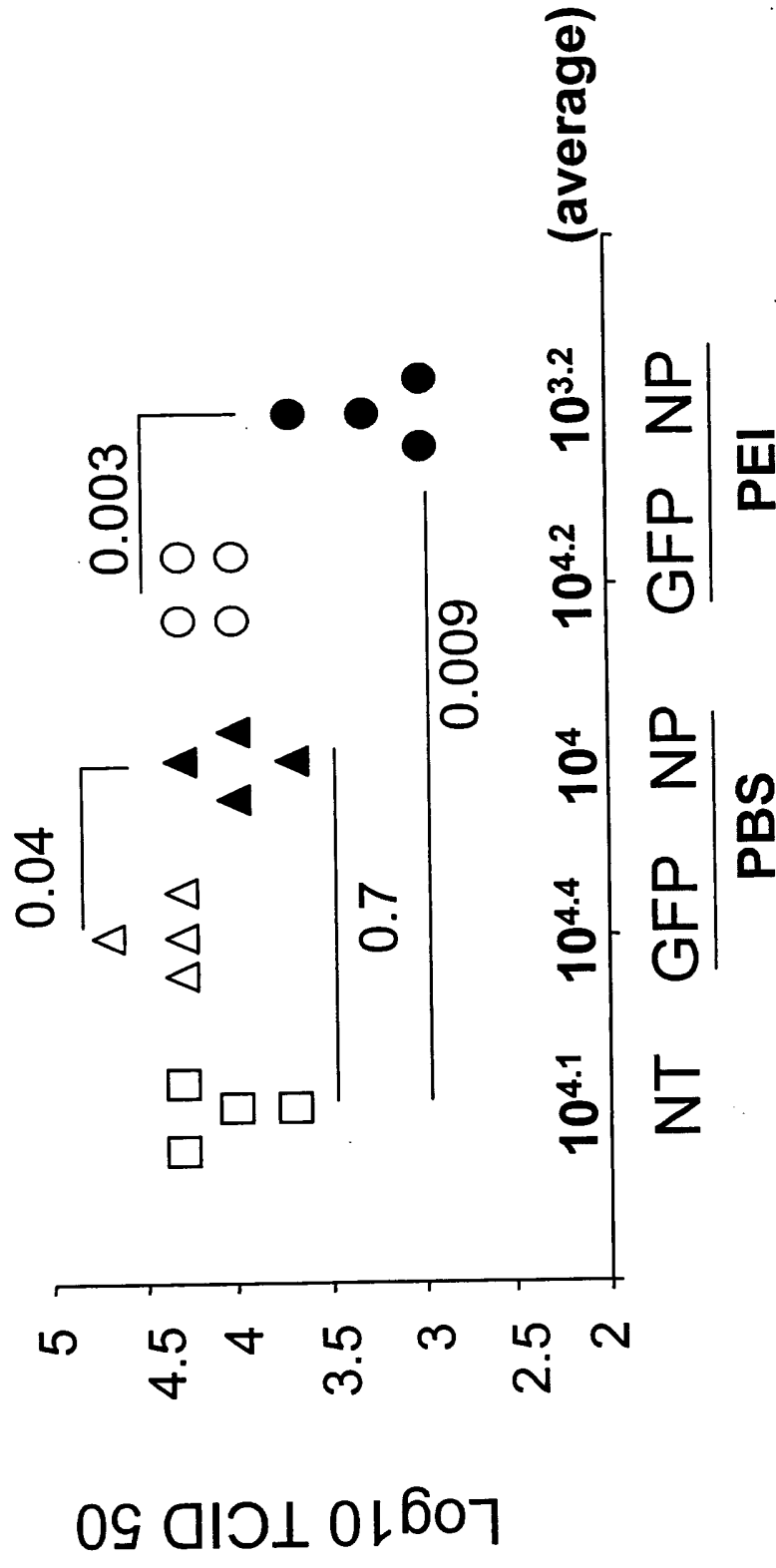
# The in vivo Transfection Effect of Poly-L-Lysine(42K)



siRNA + 3 h → PR8, i.n. 24 h → MDCK  
PLL, i.v. 12k pfu/mouse homogenate HA assay

FIGURE 8B

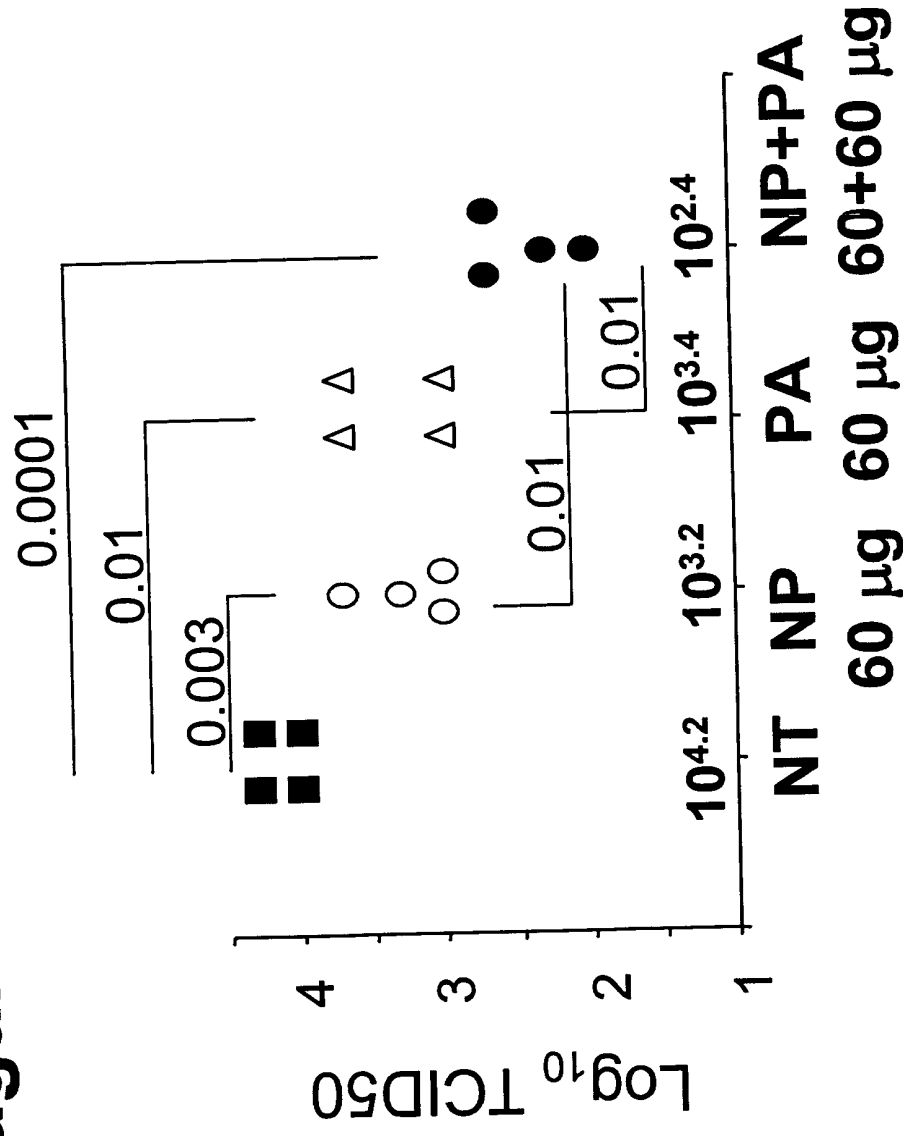
# siRNA Prevent Influenza Virus Production in vivo



siRNA -/+ 3 h → PR8, i.n. 24 h → MDCK  
PEI, i.v. 12k pfu/mouse → homogenate HA assay

FIGURE 8C

# Additive/synergistic effect of siRNA against influenza virus in mice



siRNA + 3 h → PR8, 24 h → 25 µl lung → MDCK  
Carrier 1, i.v. → 2k pfu/mouse → homogenate → HA assay

Figure 9

# siRNA inhibit influenza virus Production in infected mouse

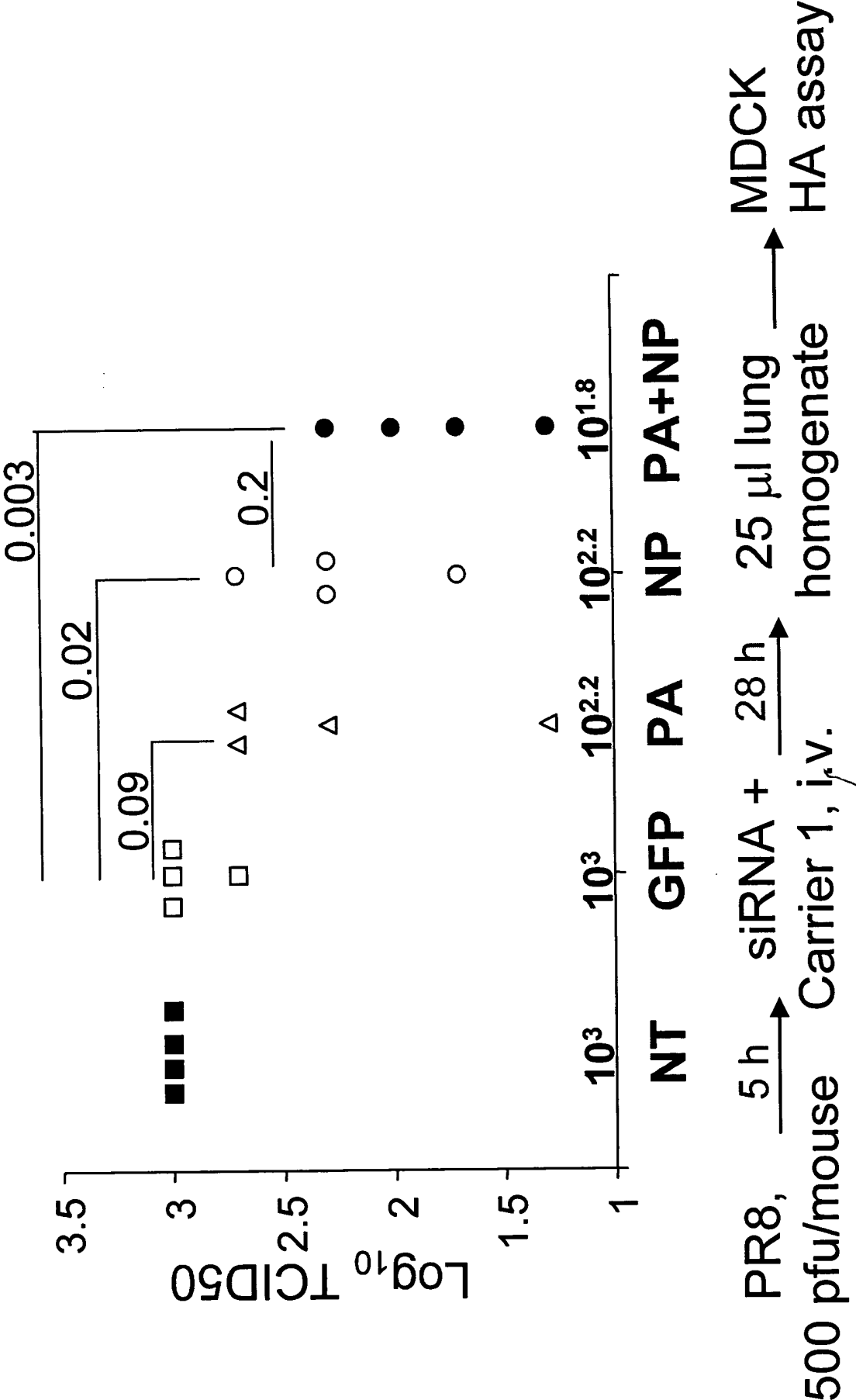
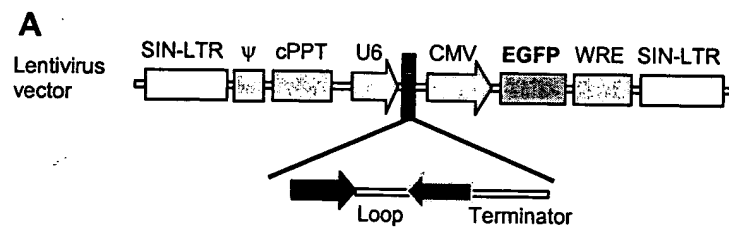


FIGURE 10



NP-1496<sub>shRNA</sub>

5' - GGAUCUUUUUUCUUCGGAGA UU<sup>C</sup> A

UU CCUAGAAUAAAGAAGCCUCU AG<sup>A</sup> G

SEQ ID NO: 36

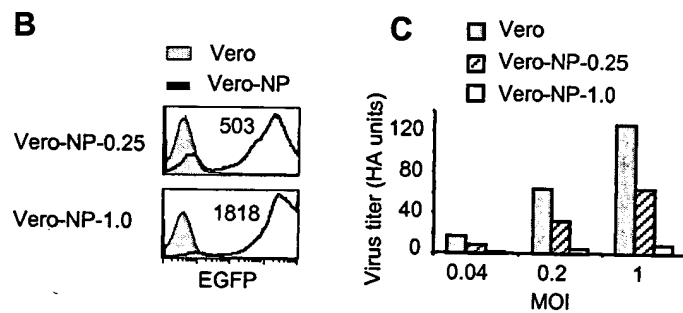


FIGURE 11

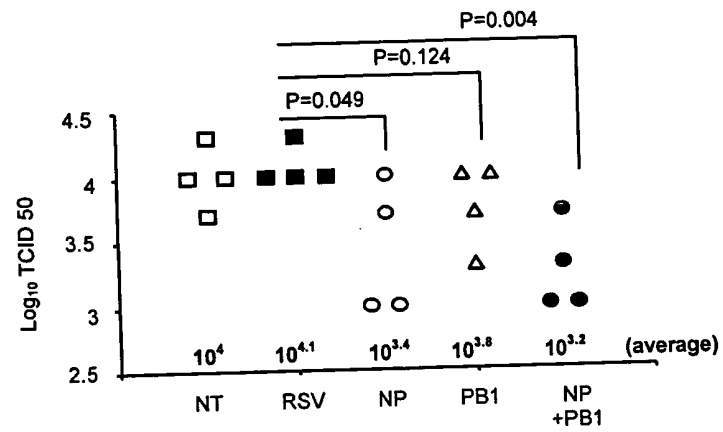


FIGURE 12

# Electrophoretic retardation of siRNA with poly-L-lysine

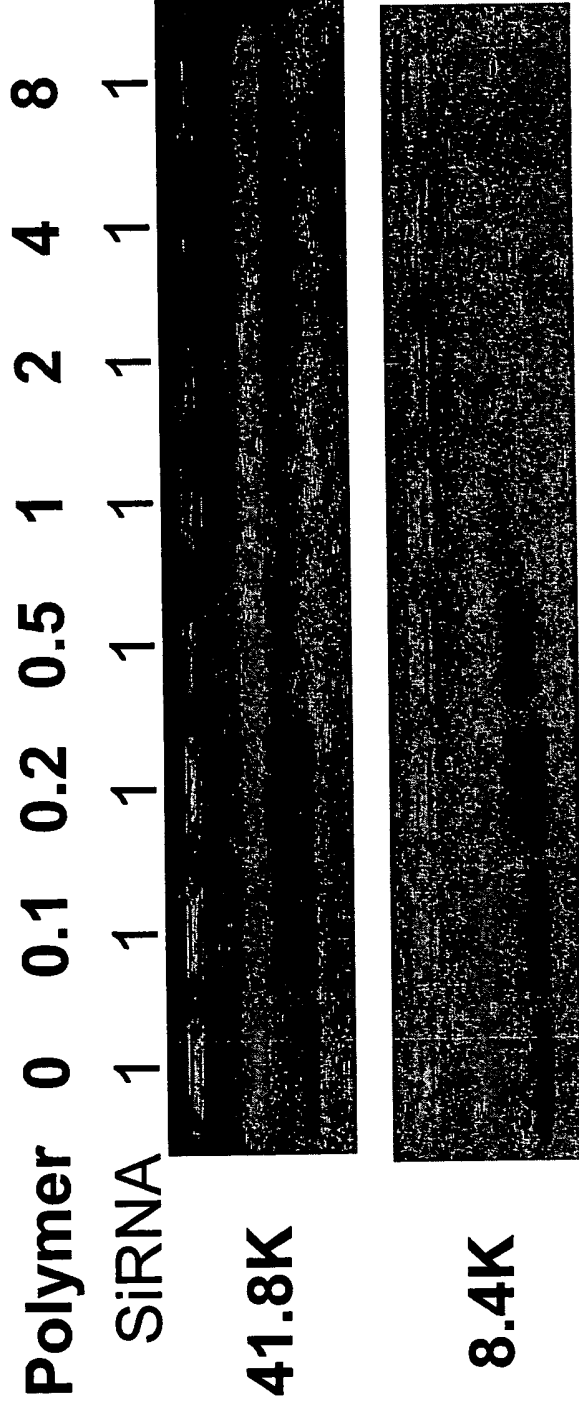


FIGURE 13A

# Electrophoretic retardation of siRNA with poly-L-arginine

PLA	0	0.02	0.06	0.17	0.5	1.5	4.5	13.5	43.5
SiRNA	1	1	1	1	1	1	1	1	1

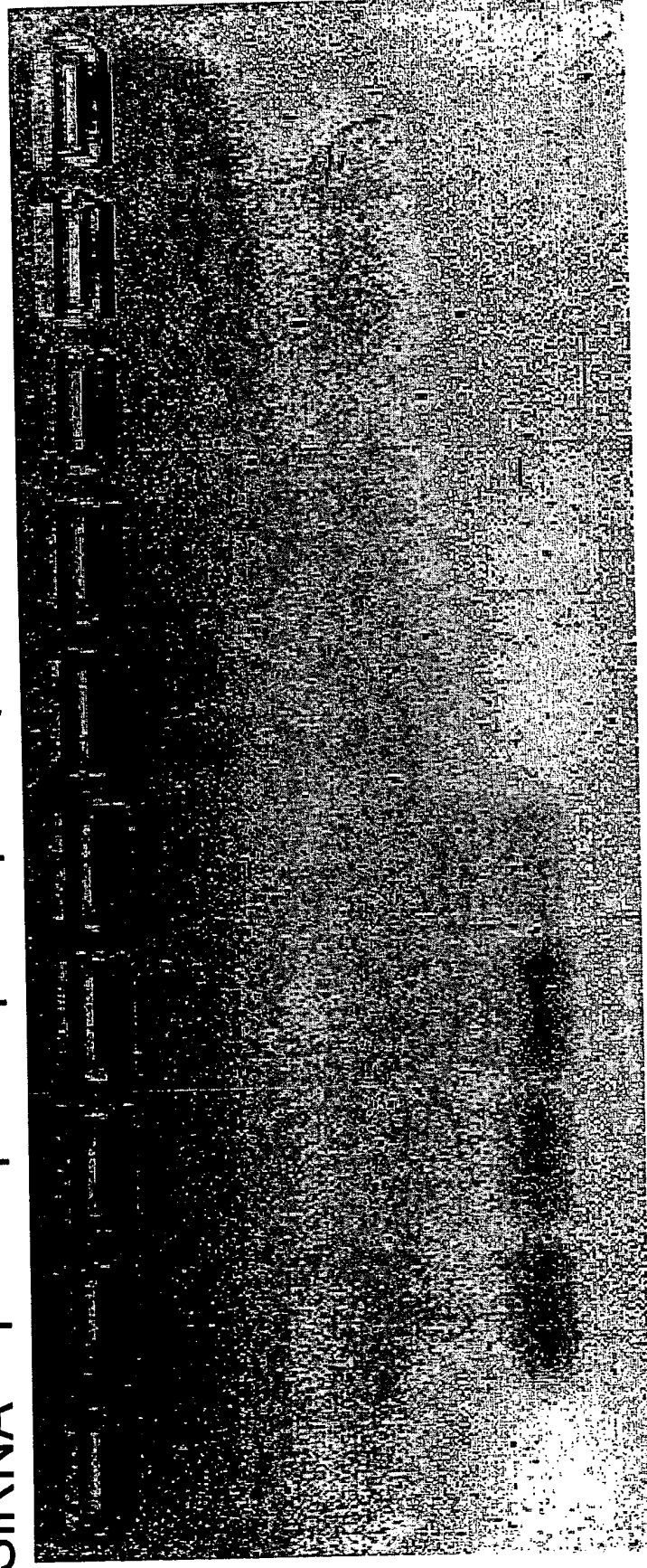


Figure 13B



# Comparison of poly-L-lysine with different molecular weight

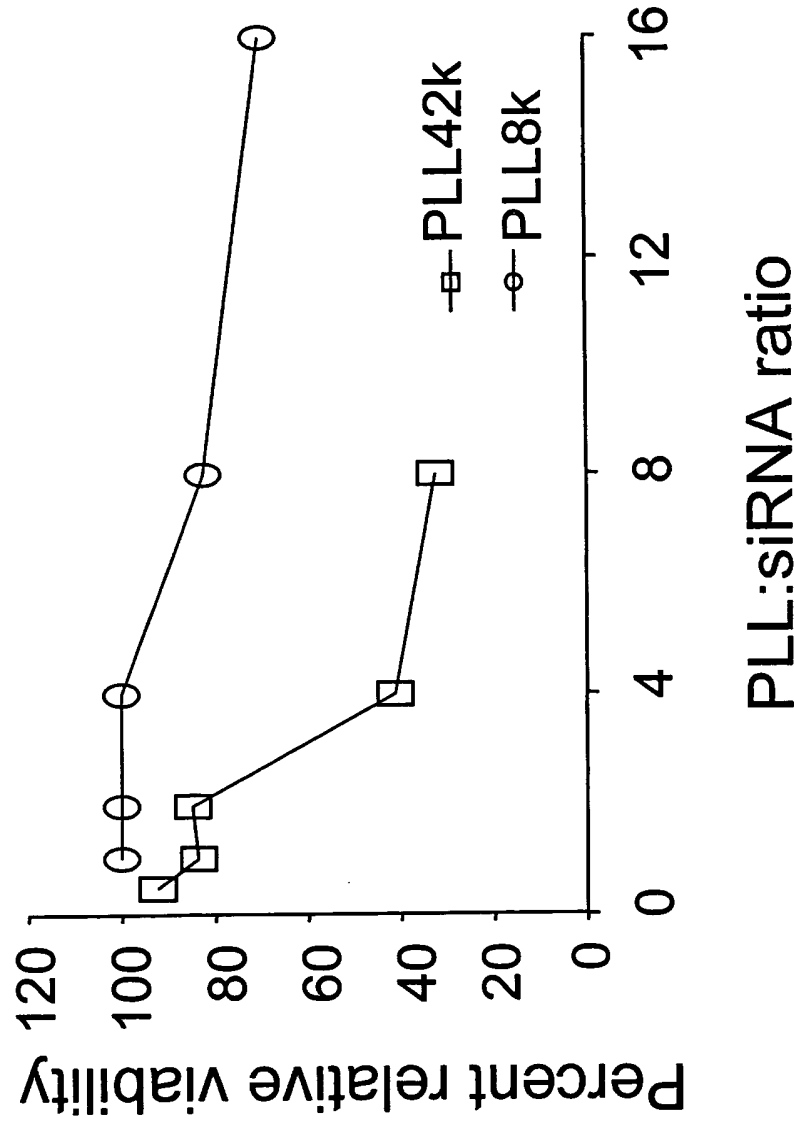


Figure 14A

# In vitro cytotoxicity of poly-L-arginine

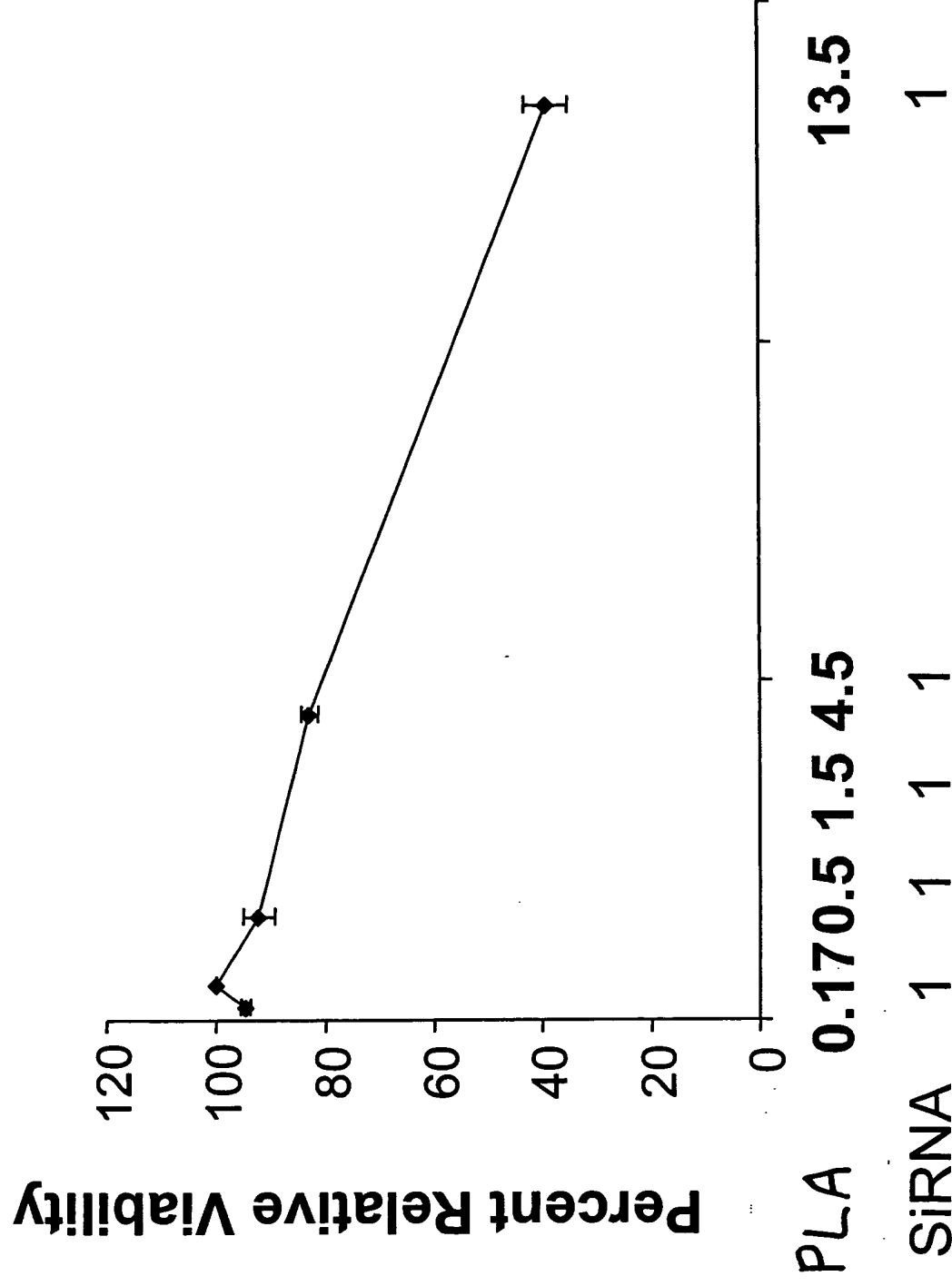
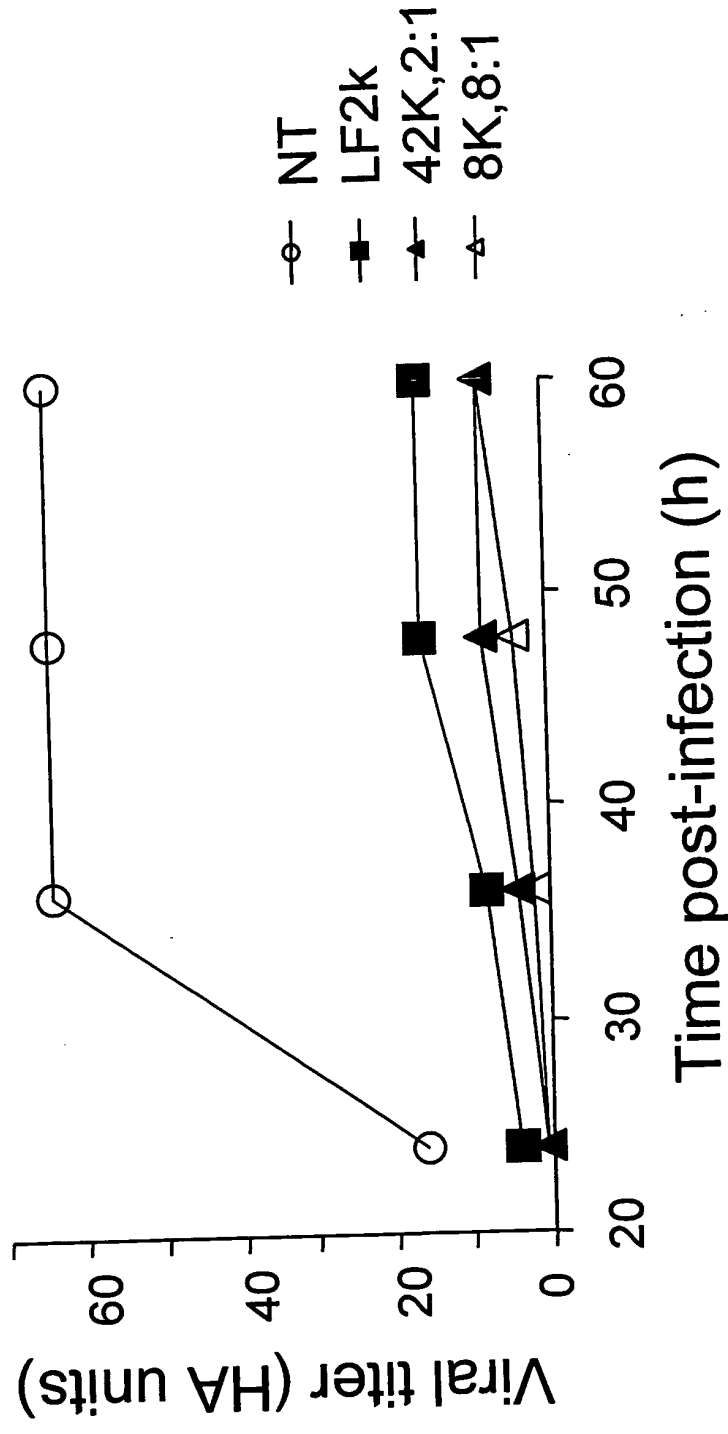


FIGURE 14B

# Comparison of poly-L-lysine with different molecular weight



siRNA:  $4 \times 10^{-10}$  M

42K PLL:  $2.9 \times 10^{-10}$  M

8.4K PLL:  $57 \times 10^{-10}$  M

Figure 1SA

# Poly-L-arginine helps cellular uptake of siRNA in vitro

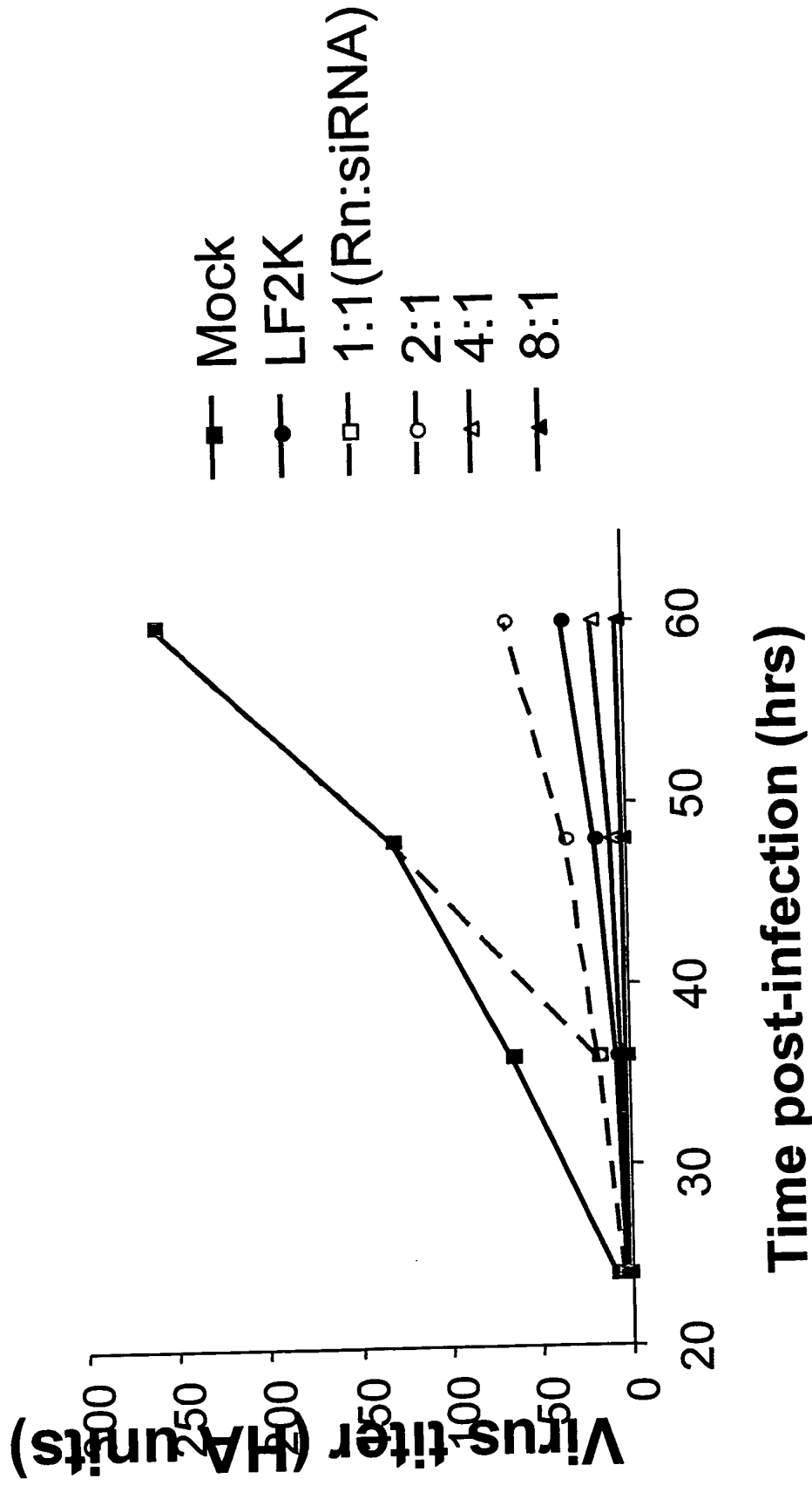
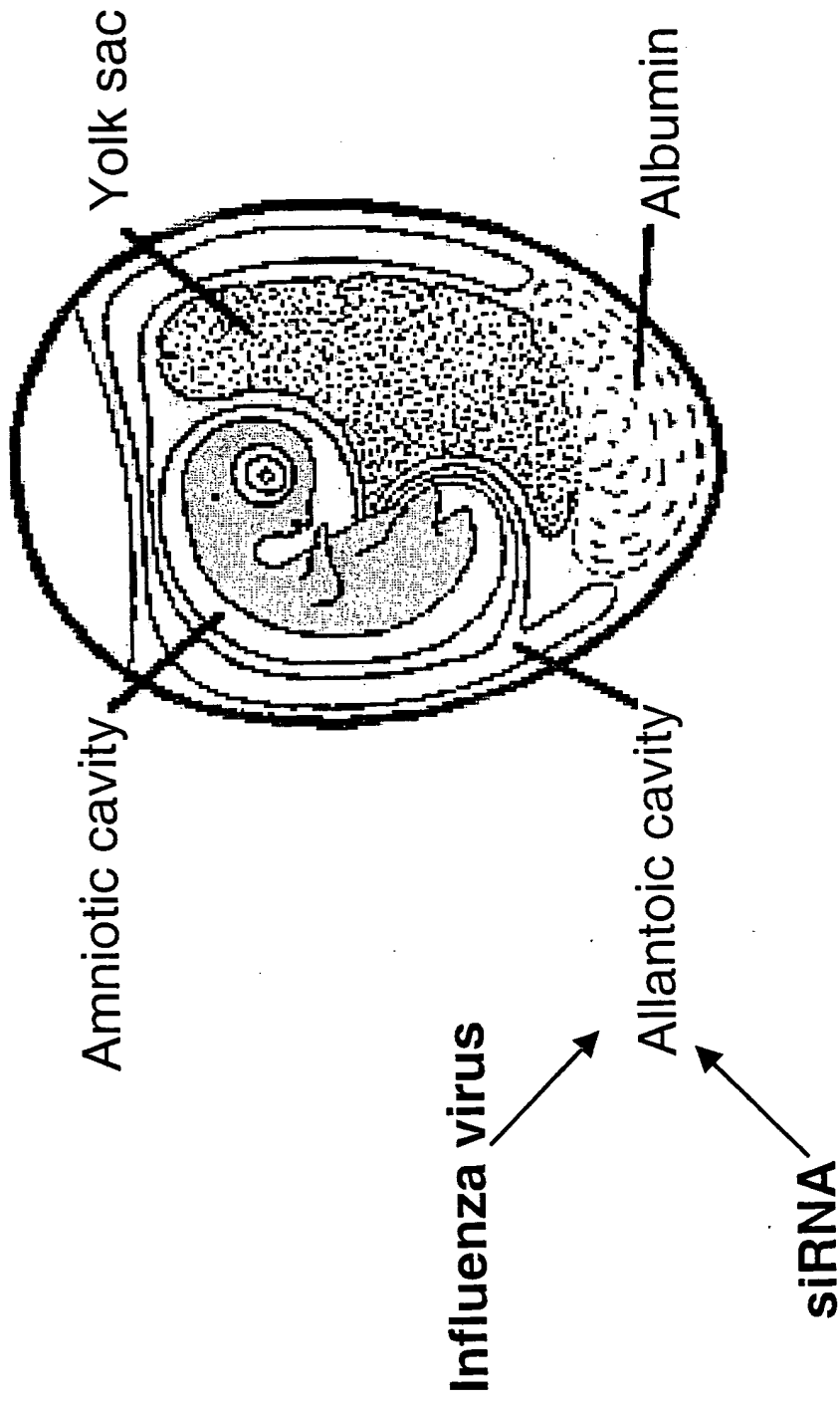


FIGURE 15B



10-day old fertilized chicken egg

FIGURE 16A

# The inhibition of influenza A virus replication in chicken embryos

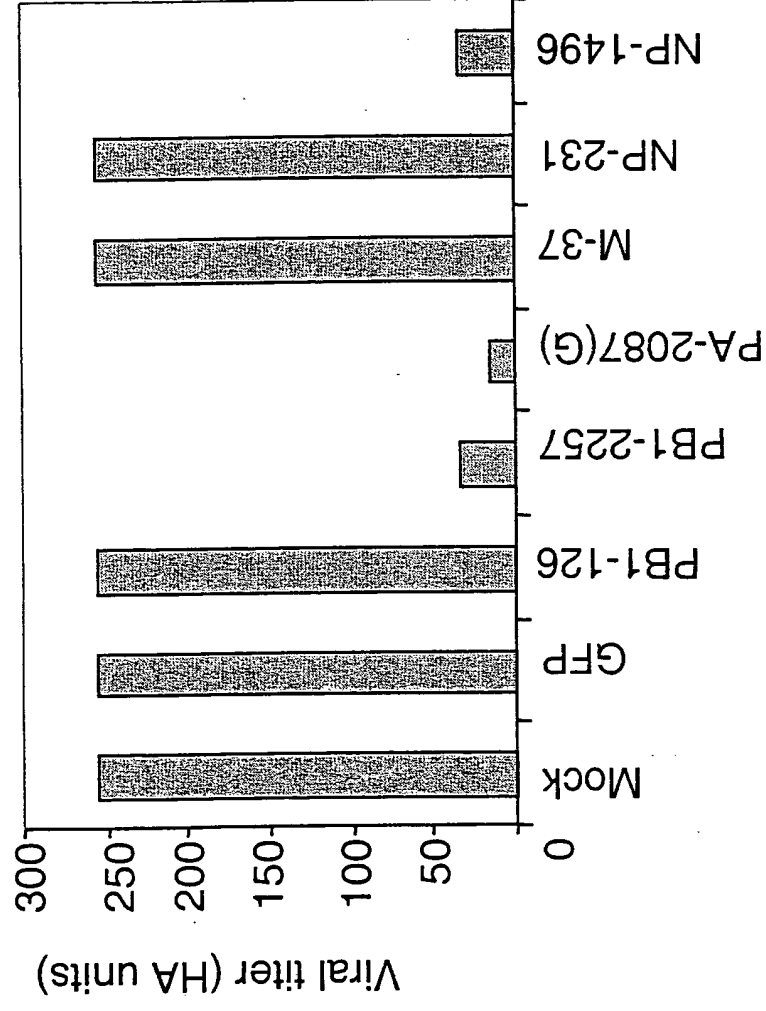


Figure 16B